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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10 025,120	12/18/2001	William Von Novak	010551	3814

23696 7590 06/19/2003

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

LEA EDMONDS, LISA S

ART UNIT PAPER NUMBER

2835

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,120

Applicant(s)

VON NOVAK, WILLIAM

Examiner

Lisa Lea-Edmonds

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8-13, 17-20, and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Matthews (5432510). With respect to claims 1-4, 8-13, 17-20, and 22-26, Matthews teaches a handheld electronic device comprising a housing; a plurality of input keys disposed around the housing locations where fingers will naturally land when the handheld device is being held in an average-sized hand; and a processing circuit within the housing and coupled to the plurality of keys, the processing circuit being responsive to actuation of a selected combination of at least one key by generating data representing a character, wherein the processing circuit comprises an interface coupled to the plurality of keys for generating said data representing a character; and a processor for processing said data representing a character, wherein the processing circuit further comprises a store coupled to the processor for storing data for use by the processor, further comprising a display for displaying a representation of said character represented by the data generated by the processing circuit, wherein the plurality of key comprises four keys positioned for actuation by a respective finger of a said average-sized hand, and a fifth key positioned for actuation by the thumb of a said average-sized hand, wherein the interface comprises a lookup table defining a relationship between the generated data and the combinations of at least one key, wherein the relationship is defined for characters in an alphabetical order, wherein the

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relationship is defined for characters in a most frequently used letter order, wherein the plurality of key comprises four keys positioned for actuation by a respective finger of a said average-sized hand, and a fifth key positioned for actuation by the thumb of a said average-sized hand, wherein the interface comprises a lookup table defining a relationship between the generated data and the combinations of at least one key, wherein the relationship is defined for characters in an alphabetical order, wherein the relationship is defined for characters in a most frequently used letter order. Matthews also teaches a handheld electronic device comprising a housing; a plurality of input keys disposed around the housing at locations where fingers will naturally land when the handheld device is being held in an average-sized hand; an interfacing and processing unit coupled to the plurality of keys and responsive to actuation of a selected combination of at least one key by generating data representing a character and processing said data; and a display for displaying a representation of said character represented by the data generated by the processing circuit, and wherein the processor is arranged to control the display to display an indication of characters that will be input if a combination of one or more input keys is actuated by the user; and an apparatus for generating input data, the apparatus comprising a housing; a display screen mounted to the housing; a plurality of input keys proximate to the display screen and disposed around the housing at positions that facilitate respective actuation by and least some digits on a single hand; a processor, coupled to the input keys and to the display screen, for generating data representing symbols for display on the display screen, which symbols identify combinations of at least one input key corresponding to

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respective characters from a character set, the processor responding to simultaneous action of an identified combination by generating digital data representing the corresponding character displayed on the display screen, and a data input device comprising a housing; a plurality of user operable input means disposed about the housing; data generating means for generating display data defining graphics identifying combinations of at least one of said user operable input means and a set of characters respectively associated with said combinations; displaying means mounted to said housing and coupled to said processing means for displaying said graphics defined by said display data; and generating means coupled to the plurality of user operable input means and responsive to actuation of a selected combination of at least one user operable input means by generating data representing the character identified by the displayed graphics, wherein the data generating means is responsive to manipulation of said user operable input means to generate data defining graphics for another set of characters respectively associated with said combinations, wherein the data generating means is arranged to generate data for characters which are displayed in an alphabetical order, wherein the data generating means is arranged to generate data for characters which are displayed in a most frequently used letter order. Matthews also teaches a method of generating input data using an input device in which a plurality of input keys are disposed around a display screen, the method comprising generating display data defining graphics identifying combinations of at least one of said input keys and a set of characters respectively associated with said combinations; displaying said graphics defined by said display data; and responding to actuation of a selected

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combination of at least one user operable input means by generating data representing the character identified by the displayed graphics, further comprising responding to manipulation of said input keys by generating data defining graphics for another set of characters respectively associated with said combinations, wherein the display data is generated for characters which are displayed in an alphabetical order, wherein the display data is generated for characters which are displayed in a most frequently used letter order, further comprising generating data representing graphics identifying sub-sets of characters from a character set; and responding to manipulation of said input keys by outputting data so as to change the display screen from displaying graphics corresponding to one sub-set of characters to displaying graphics corresponding to another sub-set of characters as claimed (see for example figures 1-6 and column 6 line 30 through column 17 line 8).

Claim Rejections - 35 USC § 103

1. Claims 14-16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews (5432510) as applied to the claims above, and further in view of Pallakoff (2002/0163504). With respect to claims 14-16 and 21, Matthews teaches the invention as claimed by claims 13 and 17 (see the above 102 rejection). However, Matthews lacks a teaching of the input keys comprising a jog key as claimed. Pallakoff is relied upon for its teaching of the input keys comprising a jog key as claimed (see for example paragraph 193). It would have been obvious to one of ordinary skill in the art at the time inventions were made to incorporate the teachings of Pallakoff into the

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apparatus of Matthews to provide the user with multifunction keys, thus minimizing the over-all apparatus.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please note the handheld devices of Heusinkveld (4791408), Langford (US 2003/0083020), Pallakoff (US 2002/0151283), Hanson et al. (5483235), Harrison (6184804), Want et al., (5825675), and Cummings (6057788).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lea-Edmonds whose telephone number is 703-305-0265. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 703-308-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-1782.

Lisa Lea-Edmonds
Examiner
Art Unit 2835

June 15, 2003

